

1 1. In a tuning system for tuning to channels of a plurality of different broadcast
2 types, a method of efficiently tuning to a channel of one of the broadcast types without a
3 user having to designate the broadcast type, the method comprising the following:

4 a step for storing a plurality of service records, each service record containing
5 tuning information for tuning to a channel of one of the plurality of broadcast types;

6 a step for categorizing the plurality of service records into a plurality of
7 service spaces;

8 a step for receiving a selection of one of the service records in one of the
9 service spaces; and

10 a step for tuning to a channel corresponding to the selected service record
11 using the tuning information provided in the service record.

12
13 2. The method according to Claim 1, wherein the step for storing comprises the
14 following:

15 an act of storing information that identifies a tuner; and

16 an act of storing information that identifies a channel tunable by the tuner.

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18 3. The method according to Claim 1, wherein the step for storing comprises the
19 following:

20 a step for accumulating the plurality of service records.

21
22 4. The method according to Claim 3, wherein the step for accumulating the
23 plurality of service records comprises the following:

24 an act of a tuner monitoring a broadcast to determine available channels.

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2 5. The method according to Claim 4, wherein the step for accumulating the
3 plurality of service records further comprises the following:

4 for each of the available channels, an act of creating a service record for the
5 available channel if a service record does not already exist for the available channel.
6

7 6. The method according to Claim 5, wherein the step for accumulating the
8 plurality of service records further comprises the following:

9 an act of including information that the tuner used to tune to the available
10 channel in the service record.
11

12 7. The method according to Claim 3, wherein the step of accumulating the
13 plurality of service records comprises:

14 a specific act of providing a loader for each tuner in the tuning system;

15 a specific act of using the loader to monitor the channels tuned to by the
16 corresponding tuner for a new channel;

17 a specific act of a master service control creating a new service record
18 corresponding to the new channel; and

19 a specific act of including the tuning parameters used to tune to the new
20 channel in the new service record.
21

22 8. The method according to Claim 1, wherein the step for categorizing the
23 plurality of service records into a plurality of service spaces comprises the following:

1 for each of the plurality of service records, an act of storing a pointer
2 associated with the service record in at least one of the service spaces.

3
4 9. The method according to Claim 1, wherein the step for categorizing the
5 plurality of service records into a plurality of service spaces comprises the following:

6 an act of creating a master service space that includes pointers to all of the
7 plurality of service records.

8
9 10. The method according to Claim 1, wherein the step for categorizing the
10 plurality of service records into a plurality of service spaces comprises the following:

11 an act of categorizing at least some of the plurality of service records into
12 service spaces that are categorized according to content.

13
14 11. The method according to Claim 1, wherein the step for categorizing the
15 plurality of service records into a plurality of service spaces comprises the following:

16 an act of creating a favorites service space for including service records that
17 correspond to desirable channels.

18
19 12. The method according to Claim 1, wherein the step for tuning to a channel
20 corresponding to the selected service record using the tuning information provided in the
21 service record comprises the following:

22 an act of the tuning system tuning to a selected digital channel corresponding
23 to the selected service record using the tuning information provided in the service
24 record.

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2 13. The method according to Claim 1, wherein the selected service record
3 corresponds to a Web page.

4
5 14. The method according to Claim 13, wherein the tuning information provided
6 in the selected service record includes a Uniform Resource Identifier.
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1 15. In a tuning system for tuning to channels of a plurality of different broadcast
2 types, a computer program product for implementing a method of efficiently tuning to a
3 channel of one of the broadcast types without having to designate the broadcast type, the
4 computer program product comprising:

5 a computer readable medium for providing computer program code means
6 utilized to implement said method; and

7 wherein said computer program code means is comprised of executable code
8 for implementing the following:

9 a step for storing a plurality of service records, each service record
10 containing tuning information for tuning to a channel of one of the plurality
11 of broadcast types;

12 a step for categorizing the plurality of service records into a plurality
13 of service spaces;

14 a step for receiving a selection of one of the service records in one of
15 the service spaces; and

16 a step for tuning to a channel corresponding to the selected service
17 record using the tuning information provided in the service record.

18
19 16. The computer program product according to Claim 15, wherein the
20 executable code for implementing the step for storing further comprises executable code for
21 implementing the following:

22 an act of the tuning system storing information that identifies a tuner; and

23 an act of the tuning system storing information that identifies a channel
24 tunable by the tuner.

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2 17. The computer program product according to Claim 15, wherein the
3 executable code for implementing the step for storing further comprises the executable code
4 for implementing the following:

5 a step for accumulating the plurality of service records.

6
7 18. The computer program product according to Claim 16, wherein the
8 executable code for implementing the step for accumulating the plurality of service records
9 comprises executable code for implementing the following:

10 an act of a tuner monitoring a broadcast to determine available channels;

11 for each available channel, an act of creating a service record for the
12 available channel if a service record does not already exist for the available channel;
13 and

14 for each available channel, an act of including information that the tuner used
15 to tune to the available channel in the service record.
16

1 19. A tuning system for tuning to channels of a plurality of different broadcast
2 types without requiring a user to identify the broadcast type, the tuning device comprising:

3 a first tuner for tuning to channels of a first broadcast type;

4 a second tuner for tuning to channels of a second broadcast type;

5 a memory;

6 a controller coupled to a memory, wherein the controller is configured to
7 store a plurality of service records and service spaces in the memory, each service
8 record containing tuning information for tuning to a channel of one of the plurality of
9 broadcast types, each service space listing at least one of the plurality of service
10 record.

11
12 20. The tuning system according to Claim 19, wherein each of the plurality of
13 service spaces contains a pointer to at least one of the plurality of service records.

14
15 21. The tuning system according to Claim 20, wherein at least one of the
16 plurality of service spaces contains pointers to a service record containing information for
17 tuning to a channel of the first broadcast type and a service record containing information
18 for tuning to a channel of the second broadcast type.

19
20 22. The tuning system according to Claim 19, further comprising the following:

21 a means for receiving a plurality of different broadcast types.
22

Sw 23. In a tuning system for tuning to channels of a plurality of different broadcast
types, a method of efficiently tuning to a channel of one of the broadcast types without a
user having to designate the broadcast type, the method comprising the following:

an act of the tuning system storing a plurality of service records in a memory
accessible by the tuning system, wherein each service record contains tuning
information for tuning to a channel of one of the plurality of broadcast types;

an act of the tuning system categorizing the plurality of service records into a
plurality of service spaces;

an act of the tuning system receiving a channel selection from an input device
communicatively coupled to the tuning system, wherein the selected channel
corresponds to one of the service records in one of the service spaces;

an act of the tuning system accessing the selected service record from the
memory; and

an act of the tuning system tuning to the selected channel using the tuning
information of the accessed service record.

24. The method according to Claim 23, wherein the act of the tuning system
storing comprises the following:

an act of the tuning system storing information that identifies a tuner in each
of the plurality of service records in the memory; and

an act of the tuning system storing information that identifies a channel in
each of the plurality of service records in the memory.

1 25. The method according to Claim 23, wherein the act of the tuning system
2 storing comprises the following:

3 an act of the tuning system accumulating the plurality of service records in
4 the memory.

5
6 26. The method according to Claim 25, wherein the act of the tuning system
7 accumulating the plurality of service records comprises the following:

8 an act of at least one tuner of the tuning system monitoring at least one
9 broadcast type to determine available channels in the at least one broadcast type.

10
11 27. The method according to Claim 23, wherein the act of the tuning system
12 categorizing the plurality of service records into a plurality of service spaces comprises the
13 following:

14 for each of the plurality of service records, an act of the tuning system storing
15 a pointer associated with the service record in at least one of the service spaces.

16
17 28. The method according to Claim 23, wherein the act of the tuning system
18 categorizing the plurality of service records into a plurality of service spaces comprises the
19 following:

20 an act of the tuning system creating a favorites service space for including
21 service records that correspond to desirable channels.

22

1 29. The method according to Claim 23, wherein the act of the tuning system
2 categorizing the plurality of service records into a plurality of service spaces comprises the
3 following:

4 an act of the tuning system including a plurality of service records of a
5 plurality of broadcast types within a single service space.

6
7 30. The method according to Claim 23, wherein the act of the tuning system
8 tuning to the selected channel using the tuning information of the accessed service record
9 comprises the following:

10 an act of the tuning system tuning to a selected digital channel corresponding
11 to the accessed service record using the tuning information provided in the accessed
12 service record.

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14 31. The method according to Claim 23, wherein the selected service record
15 corresponds to a Web page.

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17 32. The method according to Claim 31, wherein the tuning information provided
18 in the selected service record includes a Uniform Resource Identifier.
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1 33. In a tuning system for tuning to channels of a plurality of different broadcast
2 types, a computer program product for implementing a method of efficiently tuning to a
3 channel of one of the broadcast types without having to designate the broadcast type, the
4 computer program product comprising:

5 a computer readable medium for providing computer program code means
6 utilized to implement said method; and

7 wherein said computer program code means is comprised of executable code
8 for implementing the following:

9 an act of the tuning system storing a plurality of service records in a
10 memory accessible by the tuning system, wherein each service record
11 contains tuning information for tuning to a channel of one of the plurality of
12 broadcast types;

13 an act of the tuning system categorizing the plurality of service
14 records into a plurality of service spaces;

15 an act of the tuning system receiving a channel selection from an
16 input device communicatively coupled to the tuning system, wherein the
17 selected channel corresponds to one of the service records in one of the
18 service spaces;

19 an act of the tuning system accessing the selected service record from
20 the memory; and

21 an act of the tuning system tuning to the selected channel using the
22 tuning information of the accessed service record.
23

1 34. The computer program product according to Claim 33, wherein the
2 executable code for implementing the act of the tuning system storing comprises executable
3 code for implementing the following:

4 an act of the tuning system storing information that identifies a tuner in the
5 memory; and

6 an act of the tuning system storing information that identifies a channel in the
7 memory.
8

9 35. The computer program product according to Claim 33, wherein the
10 executable code for implementing the act of the tuning system storing further comprises
11 executable code for implementing the following:

12 an act of the tuning system accumulating the plurality of service records.
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36. A method of creating a service record in a tuning system, the method comprising the following steps:

receiving tuning information regarding an available channel over a broadcast;

creating a service record for the available channel; and

including the tuning information in the service record.

37. The method according to Claim 36, wherein the broadcast includes information regarding available channels corresponding to a plurality of broadcast types.

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